

**PCNA**  
**Rabbit Monoclonal antibody(Mab)**  
**Catalog # AD80035**

## Specification

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### PCNA - Product info

Application	IHC-P, IHC
Primary Accession	<a href="#">P12004</a>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	28769

### PCNA - Additional info

Gene ID	5111
Gene Name	PCNA

#### Other Names

Proliferating cell nuclear antigen, PCNA, Cyclin, PCNA

#### Dilution

IHC-P~~Ready-to-use

IHC~~Ready-to-use

#### Storage

Maintain refrigerated at 2-8°C

#### Precautions

**PCNA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**

### PCNA - Protein Information

#### Name PCNA

#### Function

**Auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the leading strand. Induces a robust stimulatory effect on the 3'- 5' exonuclease and 3'-phosphodiesterase, but not apurinic- apyrimidinic (AP) endonuclease, APEX2 activities. Has to be loaded onto DNA in order to be able to stimulate APEX2. Plays a key role in DNA damage response (DDR) by being conveniently positioned at the replication fork to coordinate DNA replication with**

#### Cellular Location

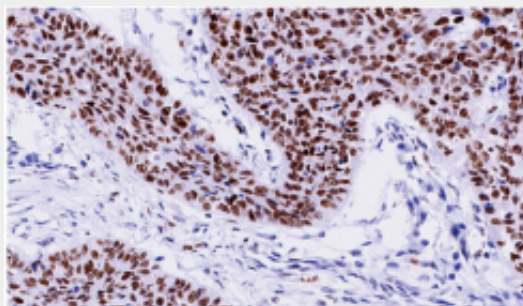
DNA repair and DNA damage tolerance pathways (PubMed:[24939902](#)). Acts as a loading platform to recruit DDR proteins that allow completion of DNA replication after DNA damage and promote postreplication repair: Monoubiquitinated PCNA leads to recruitment of translesion (TLS) polymerases, while 'Lys-63'-linked polyubiquitination of PCNA is involved in error-free pathway and employs recombination mechanisms to synthesize across the lesion (PubMed:[24695737](#)). Nucleus. Note=Colocalizes with CREBBP, EP300 and POLD1 to sites of DNA damage (PubMed:[24939902](#)). Forms nuclear foci representing sites of ongoing DNA replication and vary in morphology and number during S phase. Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents.

#### PCNA - Protocols

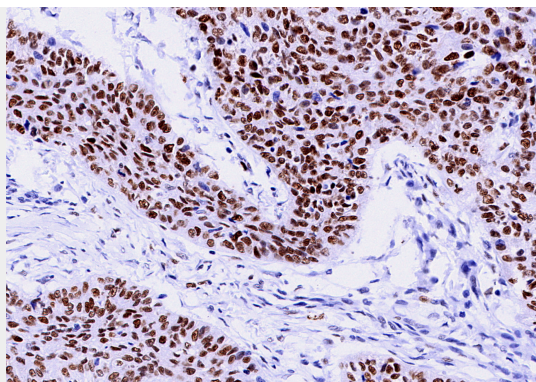
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### PCNA - Images



Lung squamous cell carcinoma



Immunohistochemical analysis of paraffin-embedded papillary thyroid carcinoma; tissue using AD80035 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9.0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems [Abcepta:AR005] was used as the secondary antibody.